

ABSTRACT OF THE DISCLOSURE

A chuck is provided for retaining the shank of a tool bit or accessory, having a fixed diameter, inserted in a central channel at a distal end of the chuck. At least one torsion spring is mounted axially within a housing and has an inner dimension and shape comparable to the shank's outer dimension and shape. A mechanism winds and unwinds the torsion spring to respectively grip or release the shank, the winding being in a rotational direction consistent with a normal operating rotational direction of the chuck such that the shank tends to further wind the torsion spring for further self-tightening in normal operation.